

SCAQMD AB2588

Facility Prioritization Procedures & Supplemental Guidance Update

RULE 1402 WORKING GROUP

SEPTEMBER 28, 2016

Background

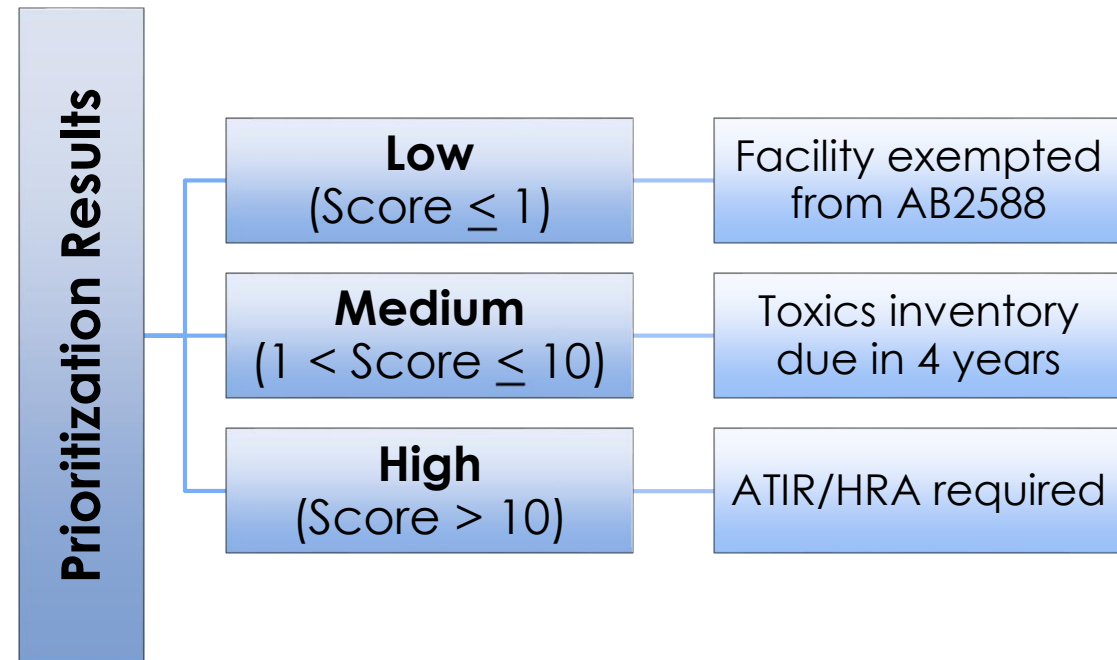
Proposed AB2588 Guidance Updates

- ▶ Proposing updates to Facility Prioritization Procedures for AB2588 to more accurately score facilities
 - ▶ Better identify facilities that are less than the Rule 1402 Notification Level
 - ▶ Streamline implementation
 - ▶ Better use of SCAQMD resources
- ▶ Proposing updates to the AB2588 Supplemental HRA Guidelines
 - ▶ Update to improve clarity
 - ▶ Incorporate proposed amendments to Rule 1402
 - ▶ Incorporate requirements for Risk Reduction Plans

Background

Current Prioritization Requirements

- ▶ AB2588 requires certain facilities to report toxics emissions every 4 years [H&S Code 44344]
- ▶ Facilities must be prioritized in a manner consistent with guidelines prepared by CAPCOA [H&S Code 44344.4(c)]
- ▶ Prioritization procedure places facilities into categories based on a conservative, screening-level health risk assessment
 - ▶ Health risk assessment similar to Rule 1401 - Tier 1 approach



Update on Recent AB2588 Activity

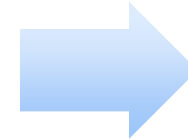
OEHHA HRA Guidance Update (2015)

- Updates childhood risk estimates
- Residential cancer risks increase ~3X, even at same emissions level



SCAQMD Rule 1402 Update (2015)

- Incorporates OEHHA update
- Guidance documents updated



CAPCOA Prioritization Guidelines Update (2016)

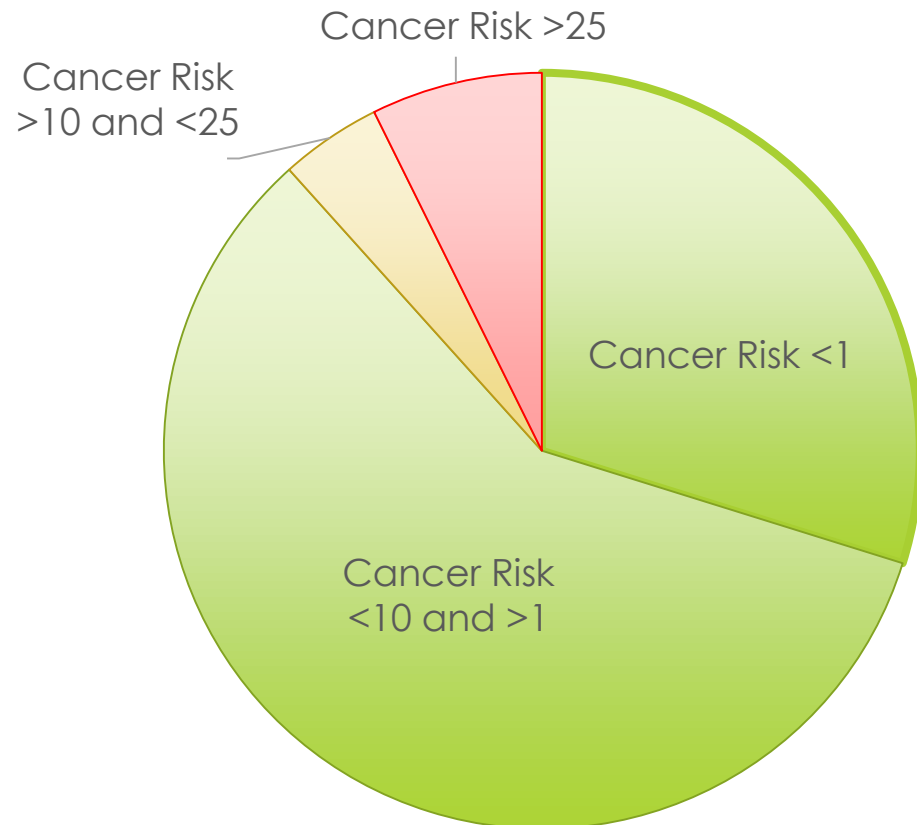
- Incorporates OEHHA update

Current SCAQMD Prioritization Procedures Approach

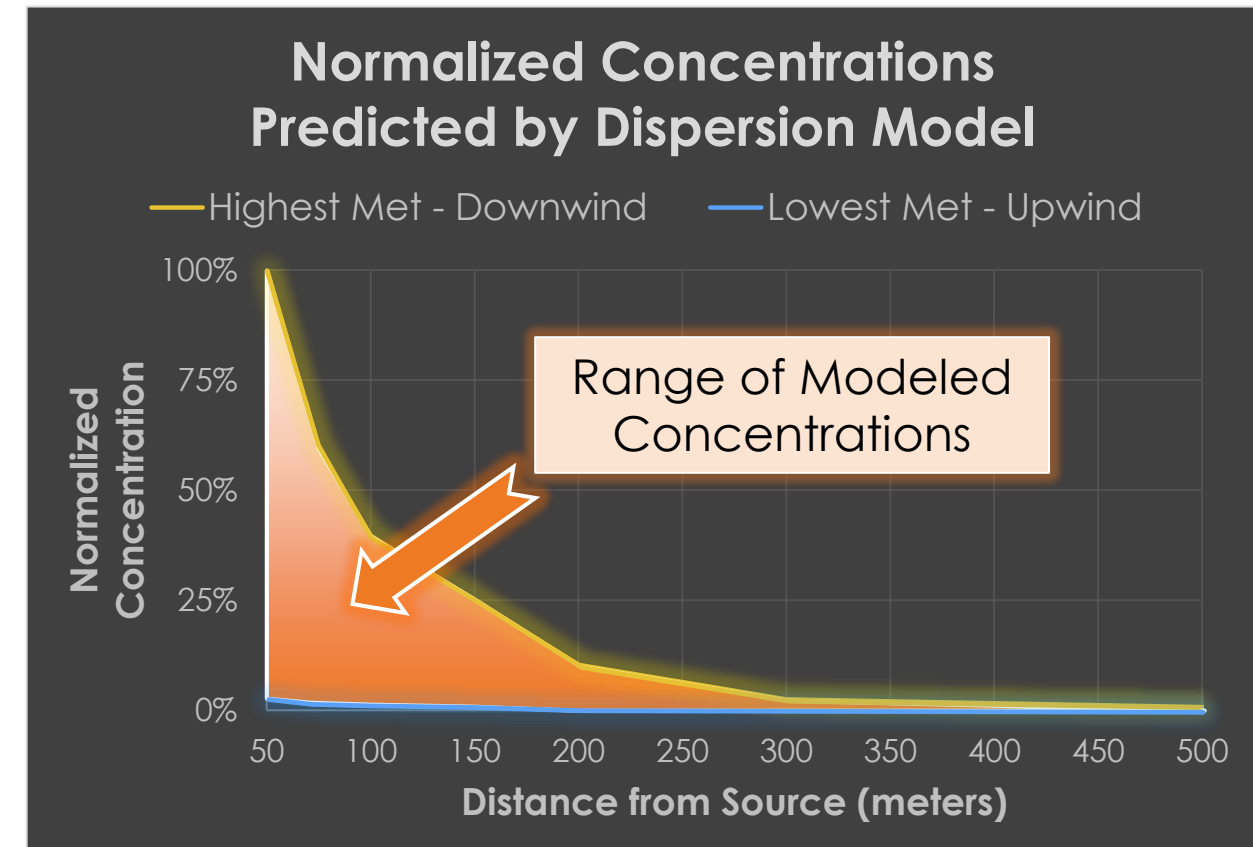
- ▶ Key Inputs (reported in AER)
 - ▶ Total Facility Emissions (by pollutant)
 - ▶ Closest Receptor Distance (resident and worker)
- ▶ Key Parameters Used to Calculate Priority Score
 - ▶ Worst case meteorology from entire Basin
 - ▶ Receptors assumed to be downwind
 - ▶ Conservative stack parameters
- ▶ Audit conducted by staff to ensure emissions and receptor distance are correct.

Key Observations from Implementing Current Prioritization Procedures

>80% of HRA's below Public Notification Level



Prioritization Procedure modeling is very conservative



Proposed Prioritization Approach

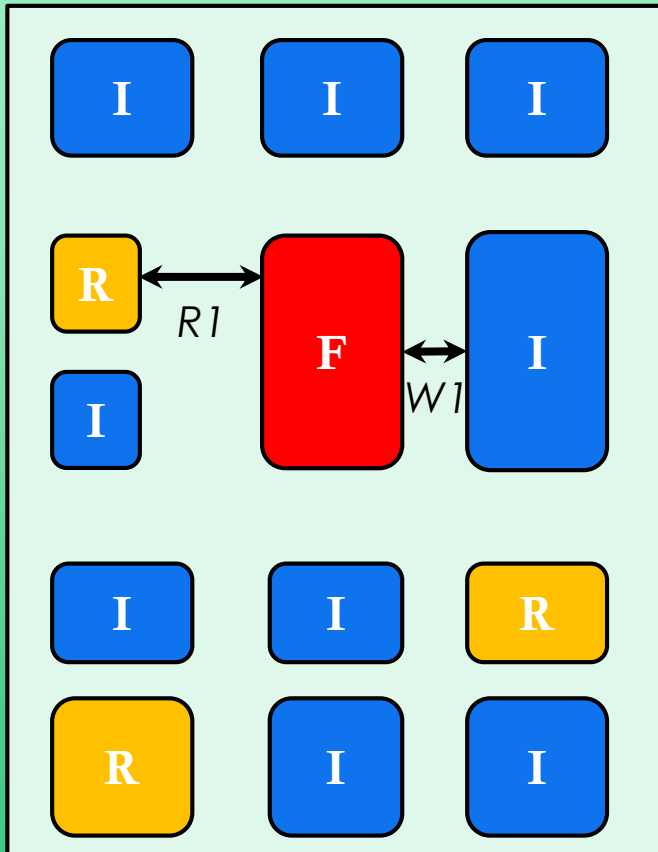
- ▶ Current prioritization procedure is similar to Rule 1401 Tier 1
- ▶ Staff is proposing a prioritization procedure that uses more accurate meteorology and receptor locations, similar to a Rule 1401 Tier 3 analysis
- ▶ Proposed prioritization approach:
 - ▶ Current Procedure + Refined Meteorology + Refined Receptor Locations
- ▶ Proposed approach uses the same emissions data and assumes same conservative stack parameters

Proposed Prioritization Approach

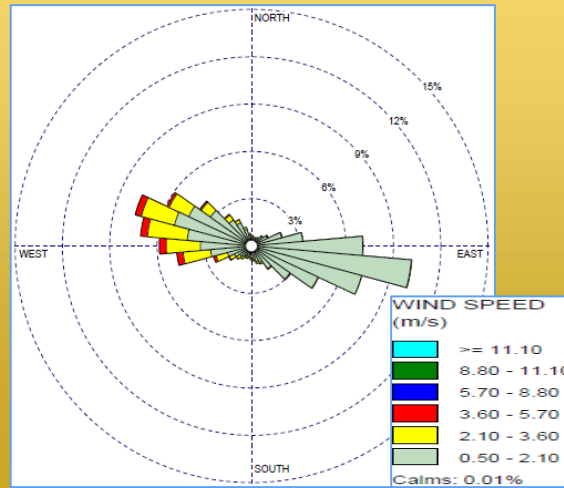
- ▶ Key Inputs
 - ▶ Total Facility Emissions (by pollutant)
 - ▶ Closest Receptor Distance (resident and worker)
 - ▶ **Facility Location**
 - ▶ **Receptor Locations (staff input)**
- ▶ Key Parameters Used to Calculate Priority Score
 - ▶ ~~Worst case~~ Meteorology from ~~entire Basin~~ local area
 - ▶ Receptors **in actual location** ~~assumed to be downwind~~
 - ▶ Conservative stack parameters

Example – Current Prioritization Approach

MAP – Downtown LA



Met Data (Worst Case)
Redlands

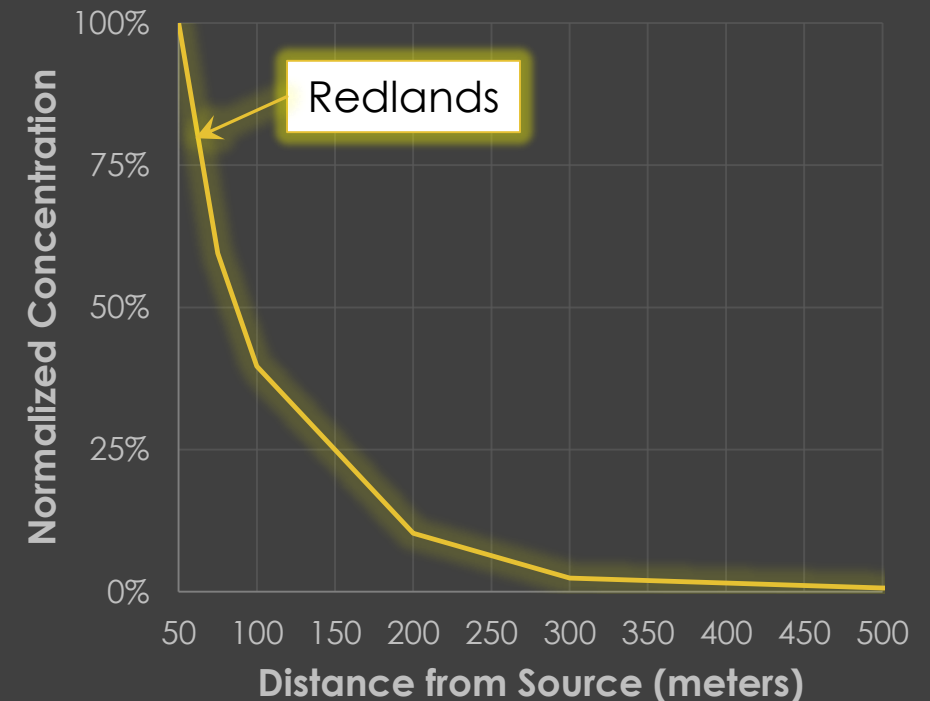


Distances (Closest)

Residential = R1

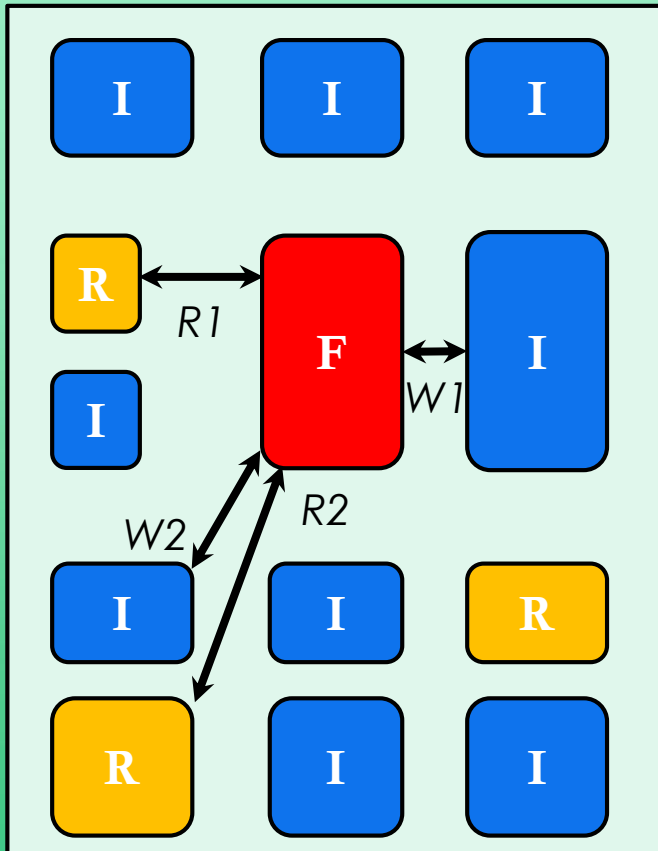
Worker = W1

Normalized Concentrations
Predicted by Dispersion Model

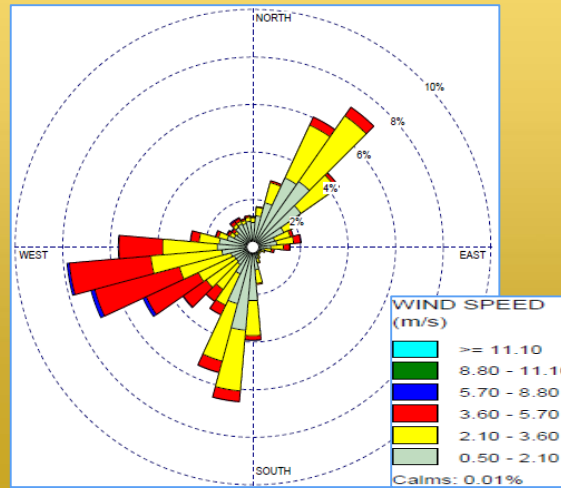


Example – Proposed Prioritization Approach

MAP – Downtown LA



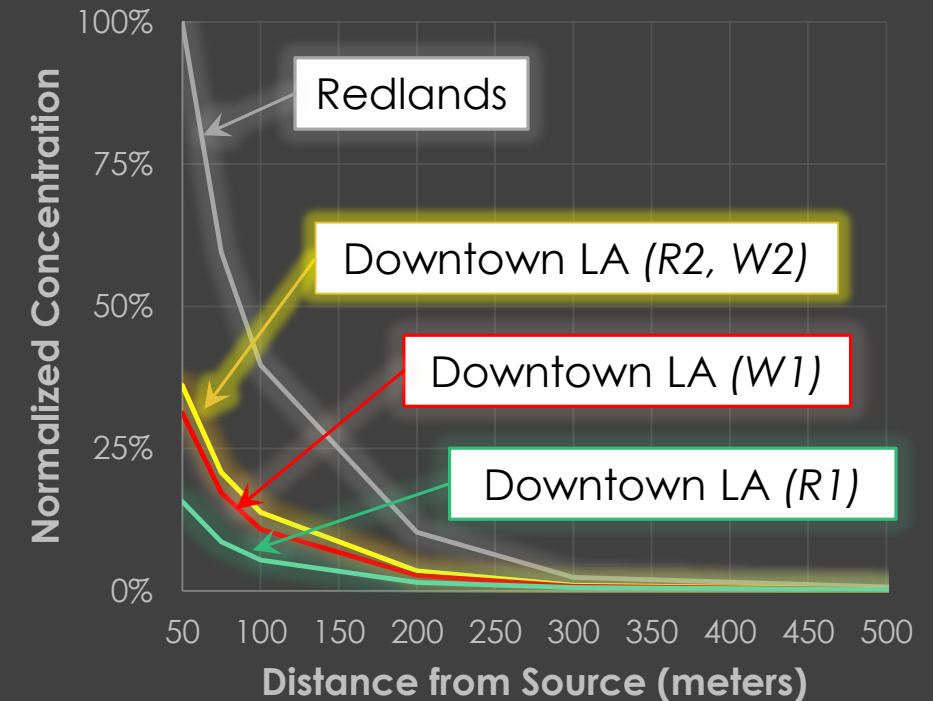
Met Data (Local)
Downtown LA



Distances (Actual)

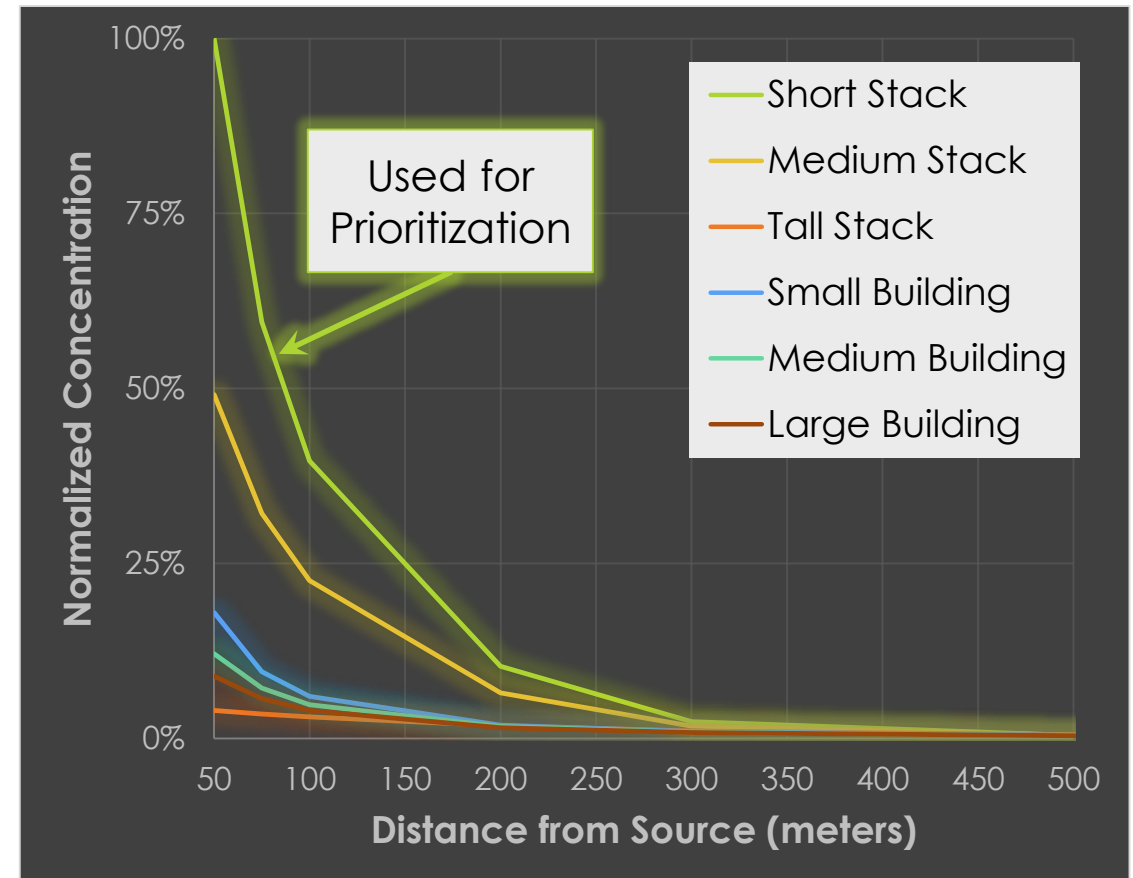
Closest Residential = R1
Closest Worker = W1
Downwind Residential = R2
Downwind Worker = W2

Normalized Concentrations
Predicted by Dispersion Model



Conservative Assumptions That Would Remain in Prioritization

- ▶ All emissions assumed to come out of one stack
- ▶ Stack assumed to be short, with low velocity (less dispersion)
- ▶ Emissions assumed to occur over 24-hour day, including during calm nighttime meteorology (less dispersion)



Potential Impact of Proposed Prioritization Guidance Update on SCAQMD AB2588 Program

Quadrennial Reporting Year	Total Number of AB2588 Core Facilities	Current Approach PS>10	Proposed Approach PS>10
2014	65	29	19
2015	159	63	35

➤ ~40% reduction in facilities with Priority Score >10

Update to SCAQMD AB2588 Supplemental Guidelines

- ▶ Guidance last updated in 2015 to take into account new OEHHA HRA Guidelines
- ▶ Proposed guidance update provides clarification on:
 - ▶ Inclusion of emissions data after HRA base year
 - ▶ Presentation to Stationary Source Committee June 2015
 - ▶ Guidance for elements to be included in Risk Reduction Plans and Progress Reports
 - ▶ Proposed amendments to Rule 1402
 - ▶ Early Action Reduction Plans for Potentially High Risk Facilities
 - ▶ Voluntary Risk Reduction Plans
 - ▶ Other minor clarifications

Supplemental Guidance Update – Inclusion of Recent Emissions Data Into HRA

- ▶ AB2588 HRAs take 'snapshot' of a Base Year emissions inventory
 - ▶ Base Year is most recent quadrennial year unless Executive Officer specifies a different year
- ▶ Not uncommon that more recent emissions are substantially different than Base Year
- ▶ HRA can include supplemental appendix describing how risks would be different based on more recent data
- ▶ Base Year used to compare HRA risks against Rule 1402 Public Notification Threshold
- ▶ Most recent emissions year can be used to compare HRA risks against Rule 1402 Risk Reduction Threshold *only if*:
 - ▶ Emission reductions are permanent, enforceable, and verifiable

Risk Reduction Plan Elements

- ▶ No new requirements proposed
- ▶ Some RRP elements are similar to HRA elements
 - ▶ Facility identifying information (e.g., Facility ID)
 - ▶ Updated Emissions Inventory + Dispersion modeling + HRA
- ▶ Additional elements
 - ▶ Identification of sources to be controlled, the level of control, and estimate of post-RRP residual risk
 - ▶ Engineering analysis demonstrating effectiveness of measures
 - ▶ Schedule of implementation
 - ▶ Certification by an official responsible for operation of the facility
 - ▶ If necessary, a request for time extension and the justification for the request

Risk Reduction Progress Reports

- ▶ Facilities implementing a RRP or VRRP must submit an Annual Risk Reduction Progress Report
- ▶ Update to Supplemental Guidelines includes elements to include in report
 - ▶ A description of emissions increases/decreases since RRP or VRRP approval
 - ▶ The increment of progress made to reduce risks over previous twelve months
 - ▶ Submittal date and status of all applicable permit applications, including for other agencies
 - ▶ Schedule of future expected increments of progress, and any expected delays compared to the schedule included in the RRP or VRRP

Guidance for Proposed Amendments to Rule 1402

- ▶ No new requirements proposed
- ▶ Voluntary Risk Reduction
 - ▶ Proposed update to Supplemental Guidelines points to Voluntary Risk Reduction Program Guidelines included in Rule 1402 Board package for October
- ▶ Potentially High Risk Facilities
 - ▶ Proposed update to Supplemental Guidelines copies proposed rule language

Comments?

- ▶ Submit comments to:

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